

EXHIBIT A

**TO THE DECLARATION OF ARPITA
BHATTACHARYYA IN SUPPORT OF ASETEK
DANMARK A/S'S MOTION FOR PARTIAL
SUMMARY JUDGMENT**

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

ASETEK DANMARK A/S,)
)
Plaintiff and) Case No. 3:19-cv-00410-EMC
Counterdefendant,)
)
v.)
)
COOLIT SYSTEMS, INC.,)
)
Defendant and)
Counterclaimant,)
)
COOLIT SYSTEMS USA INC.,)
COOLIT SYSTEMS ASIA)
PACIFIC LIMITED, COOLIT)
SYSTEMS (SHENZHEN) CO.,)
LTD., CORSAIR GAMING,)
INC., CORSAIR MEMORY,)
INC.,)
)
Defendants.)
-----)

THURSDAY, JANUARY 6, 2022

REMOTE Videotaped Deposition of HIMANSHU
POKHARNA, PH.D., beginning at 9:16 a.m., before
Nancy J. Martin, a Registered Merit Reporter,
Certified Shorthand Reporter. All parties appeared
remotely.
Job no. 5008250
Pages 1 - 142

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ALSO PRESENT:

JOHN ABRAHAM

DAVID WEST, LEGAL VIDEOGRAPHER

1 patents?

2 A. Yes.

3 Q. Is it fair to say that, sitting here today,
4 you are not in a position to say, one way or the
5 other, if there are any material differences between
6 CoolIT's initial new design and the Tamriel design as
7 they relate to Asetek's patent claims?

8 A. I believe there's only a cosmetic difference
9 between the two systems. So I don't see any reason
10 why there should not be a difference, but I have not
11 done a detailed analysis to say that with hundred
12 percent certainty.

13 Q. Dr. Pokharna, are you aware that all asserted
14 claims of CoolIT's '567 patent have been found
15 unpatentable by the patent office?

16 A. Yes, I believe PTAB has invalidated the
17 claims of '567, but I believe that CoolIT is appealing
18 that decision.

19 Q. Are you aware that claims 1, 2, 5, and 9 of
20 the '266 patent have also been found unpatentable by
21 the patent office?

22 A. I am aware that some of the claims were found
23 to be unpatentable, but I will just believe you that
24 those were the claim numbers. I don't have them
25 committed to my memory.

1 Q. I can represent to you that all the asserted
2 claims, except claims 13 and 15 of the '266 patent,
3 have been found unpatentable by the Patent Office.

4 A. Okay. I believe that.

5 Q. Okay. So let's just focus on claim 15 and 16
6 of the '266 patent. Okay?

7 A. Sorry, you mean 13 and 15?

8 Q. Sorry. Yes. Claims 13 and 15 of the '266
9 patent.

10 And you could probably answer this question
11 from the top of your head, but if you need to look at
12 your report, the claim chart for the '266 patent is
13 Exhibit 337D.

14 A. Okay.

15 Q. So you may recall, from the work you have
16 done for the IPR involving the '266 patent, that there
17 was a dispute between the parties regarding the
18 priority date of some of the claims of the '266
19 patent; right?

20 A. I recall that.

21 Q. And I'll represent to you that claims 13 and
22 15 were not involved in that priority dispute.

23 A. Okay.

24 Q. So in doing your analysis for claims 13 and
25 15 of the '266 patent, what priority date did you

1 apply?

2 A. I applied 200- -- I believe it's some date in
3 2007. And I will need to look up the exact date.
4 It's certainly not 2011, which was the other priority
5 date that you referred to earlier in the dispute.

6 Q. The asserted claims 13 and 15 of the '266
7 patent are directed to a fluid heat exchanger;
8 whereas, the asserted claims 1, 2, 5, and 9 of the
9 '266 patent are directed to a heat exchange system;
10 right?

11 MR. DYER: Objection. Vague. Outside the
12 scope.

13 THE WITNESS: Yes, but the first line of
14 claim 1 is directed to heat exchange system, and 13 is
15 to fluid heat exchanger.

16 BY MS. BHATTACHARYYA:

17 Q. The fluid heat exchanger is a component of
18 the heat exchange system; correct?

19 MR. DYER: Objection. Vague.

20 THE WITNESS: It depends. It -- it could be,
21 or it could be the same thing as well. A fluid heat
22 exchanger is certainly a heat exchange system, but
23 heat exchange system is a bit broader to me than a
24 fluid heat exchanger. But this certainly does not
25 mean that a heat exchange system could not just be a

1 fluid heat exchanger.

2 BY MS. BHATTACHARYYA:

3 Q. The fluid heat exchanger that is recited in
4 claims 13 and 15 of the '266 patent and in the other
5 CoolIT patents as well does not include the pump and
6 other components of the entire heat exchange system;
7 correct?

8 MR. DYER: Objection. Mischaracterizes the
9 record. Vague.

10 THE WITNESS: Fluid heat exchanger, that
11 is -- that the claim 13 invention describes is limited
12 to the component that comes in -- or a system that
13 comes in contact with the heat-generating device, like
14 a CPU or a GPU. However, because of the use of the
15 phrase "comprises," it does not, I believe, exclude
16 other features that might be present in a system that
17 has all of these features.

18 BY MS. BHATTACHARYYA:

19 Q. There was a claim construction for fluid heat
20 exchanger; right, Dr. Pokharna?

21 A. Can I just refresh my memory about that?

22 Q. Sure. I can direct you to your report at
23 page 6 where the claim constructions are listed.

24 A. Yeah. Yeah. I recall that. Thanks for
25 reminding me about that.

1 does not enclose the peripheral side wall of the cold
2 plate which you have referred to as the head spreader
3 plate; correct?

4 A. Yes. The same answer. The way the fastening
5 is done is with removable fasteners such that they
6 don't need to enclose the side walls of the thermal
7 exchange chamber.

8 Q. Dr. Pokharna, now is probably a good time for
9 a break. We have been going for close to an hour and
10 a half.

11 A. Okay. How long?

12 Q. We can discuss that once we go off the
13 record.

14 THE VIDEOGRAPHER: We're off the record at
15 11:51 a.m.

16 (WHEREUPON a recess was taken from 11:51 a.m.
17 to 12:33 p.m.)

18 THE VIDEOGRAPHER: We are back on the record.
19 The time is 12:33 p.m.

20 BY MS. BHATTACHARYYA:

21 Q. Welcome back, Dr. Pokharna.

22 A. Thank you.

23 Q. Dr. Pokharna, during the break -- breaks that
24 we have taken during the deposition, did you have any
25 conversation with counsel regarding the substance of

1 the testimony that you have given or you will give in
2 the deposition?

3 A. No.

4 Q. I just want to remind you that there's a
5 standing order in this case that says witnesses should
6 not have any communication with counsel regarding the
7 substance of their deposition during any breaks.

8 Do you understand that?

9 A. I did not. I understand that, and I did not
10 have any sort of communication, E-mail, written, text,
11 call, et cetera.

12 Q. Okay. Thank you.

13 So -- okay. All independent claims of the
14 '330 patent, the '284 patent and claim 13 of the '266
15 patent recite a plate positioned over and overlying
16 the microchannel fins; right?

17 A. Yes.

18 Q. So for Asetek's Gen 4 product, what part of
19 the device are you referring to as the claimed --
20 sorry -- claimed plate?

21 A. So it's shown on, I believe it's page 8 of
22 exhibit marked 337A, and it's essentially the features
23 here, the metal plate here that's upon the
24 Generation 4.

25 Q. You are not considering the rubber gasket

1 that surrounds and holds the metal plate as part of
2 the claimed plate for the Asetek Gen 4 products;
3 right?

4 A. Yes. That slide from Gen 4, the black seal
5 that is providing -- the black part that is providing
6 the sealing, as well as the gasket function for --
7 between the heat exchange plate and the housing, is --
8 I'm not mapping that as a part of the plate.

9 Q. Just so the record is clear, the black part
10 that is providing -- sorry. By "the black part that
11 is providing the sealing," you mean the -- the rubber
12 gasket that the plate -- the plate is attached to;
13 right?

14 A. Yes. This rubber piece, black -- the plate
15 is positioned inside, is not mapped explicitly as a
16 part of the plate.

17 Q. And that would be correct for all asserted
18 claims of the CoolIt patents that recite the claimed
19 term "plate"; right? So let me ask that.

20 With respect to Asetek's Gen 4 product, for
21 all asserted claims of CoolIT's patents, you are not
22 mapping the rubber gasket piece as part of the claimed
23 plate; correct?

24 A. The rubber gasket piece is serving a few
25 different functions on this Gen 4 product. It's

1 forming a seal between the plate and the housing, but
2 it is also forming a gasket between the housing -- and
3 the -- I guess it's called the outer -- the housing
4 and the outer limit of the heat sink or the heat sink
5 at the bottom.

6 So the gasket, what you're calling as the
7 black piece as a gasket, is performing both of those
8 functions, and it's not explicitly mapped to the
9 claimed plate.

10 Q. Thank you for that.

11 I just want to make -- have it clear for the
12 record that the answer that you just gave applies to
13 all of the asserted CoolIt claims that recites the
14 claimed term "plate" vis-a-vis the Asetek Gen 4
15 products; right?

16 A. Give me a moment to confirm that, please.

17 Q. Okay. Go ahead.

18 (The witness reviewed the documents.)

19 THE WITNESS: Yes, that's correct.

20 BY MS. BHATTACHARYYA:

21 Q. For Asetek's Gen 5 product -- strike that.

22 I'll direct you to the part of the claim
23 chart which starts discussing the Gen 5. Maybe that
24 would be easier.

25 The discussion of Gen 5 starts on page 30 of

Exhibit 337A.

A. Yes, I'm there.

Q. So for Asetek's Gen 5 product, you are mapping the claimed term "plate" to the rubber gasket that overlies the plurality of fins and microchannels on the heat spreader plate; right?

MR. DYER: Objection. Mischaracterizes the report.

THE WITNESS: In my report, we have mapped the portion of what you are calling -- or what Dr. Tuckerman calls a rubber gasket. The portion that overlies the channels is the claimed plate.

BY MS. BHATTACHARYYA:

Q. The portion that -- strike that.

The portion of the structure that overlies the microchannels and fins on the heat spreader plate is a rubber gasket; correct?

MR. DYER: Objection. Mischaracterizes.

THE WITNESS: It's a plate that Dr. Tuckerman is calling rubber gasket. If I were -- my way, I would rather characterize it as plate seal assembly.

BY MS. BHATTACHARYYA:

Q. That portion of the -- strike that.

The structure that overlies the fins and microchannels and the heat spreader plate is a

1 compliant structure; correct?

2 MR. DYER: Objection. Vague.

3 THE WITNESS: To me, "compliant" is a
4 relative term. And just in the way that plate is
5 compliant enough to cover the top of each of the
6 microchannels, as disclosed in the embodiments in '330
7 and the rest of the patents, the plate seal assembly
8 that you are calling as rubber gasket is similarly
9 performing the job of covering the tops of the
10 channel.

11 Whether it is compliant or not is not
12 something that is material to its function for
13 performing the task that is attached to it, as per the
14 specifications of and -- and the claims of the patents
15 from CoolIt.

16 BY MS. BHATTACHARYYA:

17 Q. Dr. Pokharna, I'm not asking you about the
18 functions of the plate. I'm just asking you the --
19 the structure that you have labeled as the plate of
20 Asetek's Gen 5 product, that structure is made of a
21 compliant material; correct?

22 A. Just like the plate is also made out of the
23 compliant material, the structure on top here also is
24 made out of compliant material.

25 Q. I don't know what plate you're referring to.

1 So I -- I'm not talking about a plate. I'm
2 just talking about the Gen 5 device, and I'm asking
3 you, the structure within the Gen 5 -- Asetek's Gen 5
4 device, which you have mapped as the plate, is made of
5 a compliant material; correct?

6 A. Anything that is claimed as plate to cover
7 the top of the channels will need to have some
8 compliance in it to cover the top of the channels. In
9 the same manner, the accused devices have these plate
10 seal assembly that is made out of material that has
11 some compliance in it.

12 Q. Dr. Pokharna, that doesn't answer my
13 question. I'll ask you again.

14 In Asetek's Gen 5 device, the structure that
15 you have mapped as the claimed plate is made of a
16 compliant material; correct?

17 MR. DYER: Objection. Asked and answered.

18 THE WITNESS: Exactly that allows a
19 disclosure of '266 and other items from CoolIt. The
20 plate is performing the task of covering the channels
21 which requires it to have some level of compliance.

22 Compliance, by itself, is sort of -- to a
23 person of ordinary skill in the art, when they are
24 reading the claimed patent and its prosecution
25 histories, to them, compliance means something that

1 can be used to cover the top of the channels.

2 When you have this whole assembly together,
3 the plate is forming the top of the channels. And for
4 that, it might need to have some compliancy. And --
5 but its structure and function, from the point of view
6 of the patent '266, is the same.

7 BY MS. BHATTACHARYYA:

8 Q. Okay. Dr. Pokharna, you're not answering my
9 question. So I -- if you want to evade it, you can
10 evade and give vague answers, but, you know, I'm going
11 to keep asking you.

12 So I'm going to -- and maybe let's take a
13 look at Exhibit 337C where you have mapped the same
14 structure that you map as the plate to a compliant
15 member. So maybe -- maybe that will help you answer
16 my question.

17 MR. DYER: When there's a question pending,
18 I'll let him answer. But, Counsel, I'd appreciate it
19 if you don't scold the witness or make comments like
20 "evading the questions." That's not appropriate.
21 Just ask your question.

22 MS. BHATTACHARYYA: Once the record -- so the
23 record is clear -- again, Mr. Dyer, please stop with
24 the speaking objections and comments. Just stop.

25 MR. DYER: Counsel, I'm commenting on your

1 comment. You shouldn't be scolding a witness like
2 that. It's not appropriate, period.

3 MS. BHATTACHARYYA: And as if CoolIt's
4 counsel has not called Asetek's experts names and
5 alluded to him lying on the record? So, please, save
6 me that. And please stop commenting.

7 MR. DYER: I just made my comment. You can
8 do -- you can do whatever you want --

9 MS. BHATTACHARYYA: And do not do that -- and
10 do not do that again, Mr. Dyer.

11 MR. DYER: I will if you make a comment like
12 that again.

13 MS. BHATTACHARYYA: Well, the record shows
14 that Dr. Pokharna is evading my question. You can
15 disagree. You could disagree. Just say, "I
16 disagree."

17 MR. DYER: Oh, I do disagree.

18 MS. BHATTACHARYYA: That's --

19 MR. DYER: Ask a question.

20 MS. BHATTACHARYYA: And that's -- and you
21 should just stop at that. Do not then go -- no need
22 to make a speech. That's all I'm saying.

23 MR. DYER: All right. The record is clear.

24 THE WITNESS: So in Exhibit C, I do call the
25 portion of the plate seal assembly that is forming

1 A. That's correct.

2 Q. So the portion of the gasket that overlies
3 the microchannel fins is also made of a compliance
4 material; correct?

5 MR. DYER: Objection. Asked and answered
6 three times.

7 THE WITNESS: So, again, the portion of the
8 gasket that overlies the microchannel fins is
9 providing the cover for the fins. And whether it is
10 compliant or not is immaterial because from the
11 previous disclosures, it's not a limitation that was
12 there in the disclosure.

13 BY MS. BHATTACHARYYA:

14 Q. I'm not asking you that. And, Dr. Pokharna,
15 you are not answering my question. I'm asking you the
16 portion of the -- let's take it this way,
17 Dr. Pokharna. The gasket that overlies the
18 microchannel fins in Asetek's Gen 5 product is made of
19 rubber; right?

20 MR. DYER: Objection. Mischaracterizes the
21 record. Mischaracterizes his testimony and his
22 report.

23 THE WITNESS: I -- I have not done a material
24 analysis on that, but it is -- I believe some of them
25 say EPDM on them. So I guess it's made out of EPDM.

1 BY MS. BHATTACHARYYA:

2 Q. And EPDM is a compliant material; correct?

3 MR. DYER: Objection. Asked and answered.

4 Lacks foundation.

5 THE WITNESS: EPDM is a soft material, yes.

6 BY MS. BHATTACHARYYA:

7 Q. EPDM is a type of rubber; correct?

8 A. That's right. Just like your roofing is also
9 made out of EPDM, the roofing on the homes is also
10 made out of EPDM plates. Yes.

11 Q. So you agree EPDM is rubber?

12 MR. DYER: Objection. Asked and answered.

13 THE WITNESS: To be honest, I don't know if
14 it is a kind of rubber or kind of plastic. But --
15 yeah, I'm not hundred percent sure if it is a kind of
16 rubber or a kind of -- it's probably more like some
17 kind of manmade rubber.

18 BY MS. BHATTACHARYYA:

19 Q. Let's look at page 17 of Exhibit 337C.

20 A. I'm there.

21 Q. Claim 1 of the '567 patent requires "the
22 compliant member to at least partially define an
23 opening positioned over the groove, wherein the
24 compliant member and the groove together define a
25 portion of an inlet manifold configured to

1 hydraulically couple in parallel each of the
2 microchannels to at least one other of the
3 microchannels"; right?

4 A. Right.

5 Q. The portion of the rubber gasket that is --
6 that overlies the microchannel fins is the compliant
7 member that defines an opening position over the
8 groove; right?

9 MR. DYER: Objection. The question is vague.

10 (The witness reviewed the document.)

11 BY MS. BHATTACHARYYA:

12 Q. Dr. Pokharna, let's strike that question.

13 Let's look at page 20 of Exhibit 337C.

14 A. I'm there.

15 Q. You have mapped an opening in the rubber
16 gasket that overlies the microchannel fins as opening
17 in the compliant member. Do you see that?

18 A. Yes. Just give me a moment here. I'm sorry,
19 I'm looking at the...

20 (The witness reviewed the document.)

21 THE WITNESS: That's right. This opening in
22 the compliant member is pointing to kind of the -- the
23 backside of that home or the -- the passageway that is
24 connecting, I believe in this case, the inlet port, to
25 the aperture; right? So there is sort of a conical

subset that is formed that is -- you can see on the left side picture where like you see aperture. So that entire section is -- that passageway which is connecting the inlet port to the groove, the opening in the compliant member is pointing to essentially a hole in that seal.

BY MS. BHATTACHARYYA:

Q. The portion of the rubber gasket that overlies the microchannels and microchannel fins of the heat spreader plate, that portion is made of a compliant material; correct?

MR. DYER: Objection. Asked and answered.

THE WITNESS: I'm sorry. You may have to repeat the question again.

BY MS. BHATTACHARYYA:

Q. The portion of the rubber gasket in Asetek's Gen 5 product that overlies the microchannels and microchannel fins of the heat spreader plate is made of a compliant material; correct?

MR. DYER: Objection. Asked and answered.

THE WITNESS: I believe that what we are referring to is the portion of the compliant seal that is positioned over the groove and providing the sealing between the second side of the housing and -- and the plate side of this plate seal assembly is made

1 out of compliant member.

2 BY MS. BHATTACHARYYA:

3 Q. Since it is a one-piece material, the other
4 side of that structure, the portions of the rubber
5 gasket that overlies the fins and microchannels of the
6 heat spreader plate is also a compliant material;
7 correct?

8 A. It's -- the entire plate fin assembly in
9 these products is made out of the same material.

10 Q. I think -- I don't think you answered my
11 question. I'm not talking about the plate fin
12 assembly. I'm talking about the rubber gasket that
13 overlies the microchannel fin and plates of the heat
14 spreader plate.

15 MR. DYER: Objection. You're
16 mischaracterizing his testimony. He's calling it one
17 thing and you're calling it another.

18 MS. BHATTACHARYYA: That's why I'm setting
19 the record straight.

20 BY MS. BHATTACHARYYA:

21 Q. I'm not talking about the heat spreader
22 plate. I'm talking about the gasket that overlies the
23 microchannels and fins of the heat spreader plate.
24 That gasket, and especially the portion of the gasket
25 that overlies the microchannel and microchannel fins,

1 is made of a compliant material; right?

2 MR. DYER: Objection. Mischaracterizes
3 testimony. Mischaracterizes his report.

4 THE WITNESS: Yeah. So that portion of
5 gasket that overlies the microchannel is what I'm
6 referring to as the plate. And I'm -- I'm agreeing
7 that that entire assembly is made out of the same
8 material.

9 BY MS. BHATTACHARYYA:

10 Q. And that same material is the compliant
11 material; correct?

12 MR. DYER: Objection. Asked and answered
13 multiple times.

14 THE WITNESS: Because it has to perform the
15 seal operation, where the compliance is really
16 important, it is -- the entire part is made out of
17 what you would call a compliant material.

18 BY MS. BHATTACHARYYA:

19 Q. Let's take a look at Exhibit 337D which
20 charts the '266 patent.

21 A. Yes.

22 Q. Let's go to page 19, which shows your mapping
23 for the element 1[d] of claim 1 of the '266 patent.
24 Do you see your annotation of, "A pair of complaint
25 surfaces flanking the opening"?

1 A. Yes, I do.

2 Q. The compliant surfaces flanking the opening,
3 that's the portion of the rubber gasket in Asetek's
4 Gen 5 product that you have mapped as the claimed
5 plate with respect to various other CoolIt claims;
6 right?

7 MR. DYER: Objection. Mischaracterizes his
8 testimony. Mischaracterizes his report.

9 (The witness reviewed the document.)

10 THE WITNESS: In the context of '266 patent's
11 mapping from claim 1, yes, we have -- I have mapped it
12 to the -- what is claimed as -- as plate to be the
13 compliant member.

14 BY MS. BHATTACHARYYA:

15 Q. I think I know what you mean, but I have to
16 get the record clear here. So you agree that the
17 portion of the rubber gasket in Asetek's Gen 5
18 product, that you have mapped as the plate recited in
19 various Asetek claims, is a compliant structure?

20 MR. DYER: Same objections.

21 THE WITNESS: I would agree with your
22 statement with just, instead of rubber gasket, I do
23 want to call it the plate gasket assembly.

24 BY MS. BHATTACHARYYA:

25 Q. By plate gasket assembly, you are referring

1 to the structure in the Asetek Gen 5 devices that
2 overlies the microchannels and microchannel fins of
3 the heat spreader plate; correct?

4 A. Yes, it overlies that as well as provides a
5 seal as well as gasketing at various fluid boundaries,
6 and especially within --

7 (The reporter requested clarification.)

8 THE WITNESS: And especially between the
9 housing and the blade portion of the plate gasket
10 assembly.

11 BY MS. BHATTACHARYYA:

12 Q. The portion -- strike that.

13 The structure in Asetek's Gen 5 product that
14 you have mapped as the claimed plate in various CoolIt
15 claims is a compliant structure; correct?

16 MR. DYER: Objection. Asked and answered.

17 THE WITNESS: Just like a plate that needs to
18 provide the upper boundary of the channels, this --
19 what you call as a compliant member is providing that
20 boundary on top of the microchannels.

21 BY MS. BHATTACHARYYA:

22 Q. It's not about what I am calling,
23 Dr. Pokharna. I'm asking for your opinion. The
24 Asetek Gen 5 product, the structure that overlies the
25 microchannels -- microchannels and microchannel fins

1 in the heat spreader plate, is a compliant structure;
2 correct?

3 MR. DYER: Objection. Asked and answered.

4 THE WITNESS: I think -- so when a person of
5 ordinary skill in the art looks at a structure being
6 compliant or not, it is relative to the function that
7 it is supposed to perform. If the top structure
8 was -- top structure on -- to cover the top of the
9 channels was totally compliant, then it could not hold
10 any pressure differential across the channels or of
11 the two sides of this, quote/unquote, compliant
12 member, and therefore, it would not perform the duty
13 of forming the top of the channels.

14 I mean, in the limit, compliancy could be
15 like, you know, something that is totally sloppy and
16 with slightest of pressure differential, it can
17 deform. And there is a certain level of stiffness
18 also that is required to cover the top of the
19 channels.

20 So the entire compliancy that you are
21 referring to in that has to do with forming the fluid
22 seals between the housing and the claimed plate. From
23 the point of view of covering the top of the
24 microchannels, if it had absolutely compliancy like
25 you are referring to, then it will not perform its

1 function as a plate.

2 So from the point of view of performance or
3 its function as the claimed plate, I don't believe it
4 has compliancy because during operation, it's not
5 going to be deforming. Although there is pressure
6 differential on the two sides of the plate, the -- one
7 side of the plate has liquid coming in. So that's
8 presumably at -- at higher pressure. And the fluid
9 going through the channels is -- because of the
10 pressure drop, has lower pressure. If it had -- if it
11 was absolutely compliant, it wouldn't hold any
12 pressure differential. So it requires some stiffness
13 also to perform its job as the top of the
14 microchannel.

15 So from that point of view, from
16 microchannel's point of view, from the point of view
17 of its job as -- to cover the top of the channels,
18 it's fairly stiff.

19 BY MS. BHATTACHARYYA:

20 Q. Dr. Pokharna, I'm not talking about
21 structural rigidity or stiffness. I am asking you
22 about the materials. So let's take a look at page 19
23 of Exhibit 337D.

24 A. Uh-huh.

25 Q. You are annotating portions of the structure

1 that overlies the microchannels and fins of the heat
2 spreader plate as a pair of compliant surfaces. Do
3 you see that?

4 A. Yes.

5 Q. And with respect to other CoolIt asserted
6 claims that recite the claim term "plate," you have
7 referred to the same portion of the structure
8 overlying the microchannels and fins as the plate;
9 correct?

10 A. That's correct.

11 Q. Ergo, the -- the structure in the Asetek
12 Gen 5 device that overlies the microchannel fins and
13 microchannels of the heat spreader plate, which you
14 have referred to as the claimed plate, are all -- also
15 have compliant surfaces; correct?

16 MR. DYER: Objection. Mischaracterizes his
17 testimony. Asked and answered and is argumentative.

18 THE WITNESS: Just because it may have some
19 compliancy does not preclude it from performing the
20 function of the claimed plate in various CoolIt
21 patents.

22 BY MS. BHATTACHARYYA:

23 Q. Again, I'm not asking you about the functions
24 of the plate. I'm just saying the portion of the
25 Asetek Gen 5 product that you refer to as the claimed

1 plate, that portion is made of a compliant material;
2 correct?

3 MR. DYER: Objection. Asked and answered.
4 BY MS. BHATTACHARYYA:

5 Q. And I'm not talking about whether that
6 portion can perform the function of a plate or not.
7 Leave that aside. I am only talking about the
8 material of the structure that you refer to as the
9 claimed plate in Asetek's Gen 5 product.

10 MR. DYER: I object again. Asked and
11 answered.

12 THE WITNESS: Again, simply because it's
13 made -- the entire assembly is made out of same
14 material as the various gaskets, in that sense, I
15 guess you could -- you could call it as compliant
16 material.

17 But, again, from the point of view of
18 channels, it -- and the flow through the channels,
19 it's not really compliant, or it will not really
20 perform the function of being a plate on top because
21 it will move under pressure, and it could exactly
22 prohibit it from doing the function that it is
23 supposed to do on top of the channels.

24 BY MS. BHATTACHARYYA:

25 Q. Even the compliant material can have some

1 microchannels communicate with each other fluidly in
2 between -- within each microchannel length.

3 Q. So you are interpreting the claim term
4 "blade" to include both the metal plate that's in the
5 Asetek accused Gen 4 product as well as the gasket
6 that is in Asetek's accused Gen 5, 6, and 7 products;
7 correct?

8 MR. DYER: Objection. Mischaracterizes the
9 report and his testimony.

10 THE WITNESS: No, that's -- that's certainly
11 not true, Counsel.

12 BY MS. BHATTACHARYYA:

13 Q. What is your -- so with respect to Asetek's
14 Gen 4 product, you are referring to the metal plate as
15 the claimed plate recited in various CoolIt claims;
16 correct?

17 A. That is correct, yeah.

18 Q. And with respect to Asetek's accused Gen 5,
19 6, and 7 products, you are referring to the gasket
20 structure that is made of rubber as the claimed plate;
21 correct?

22 MR. DYER: Objection. Mischaracterizes
23 testimony. Mischaracterizes his report.

24 THE WITNESS: The entire what I call as plate
25 seal assembly is not the claimed plate. Just like the

1 specifications of various CoolIt patents, starting
2 with '330, shows that the seal that is filling the gap
3 between the second side of the housing and top of the
4 plate could be an integral part of the claimed plate
5 in the Gen 5, 6, 7 of the accused Asetek products, the
6 seal and some other functions are integrated together
7 with the plate to form plate seal assembly.

8 BY MS. BHATTACHARYYA:

9 Q. Dr. Pokharna, I don't think that answers my
10 question, but perhaps I should rephrase my question.
11 That may help you answer it.

12 With respect to Asetek's accused Gen 5, 6,
13 and 7 products, you are referring to the portion of
14 the gasket structure that overlies the
15 microchannels -- microchannels and microchannel fins
16 of the heat spreader plate as the claimed plate;
17 correct?

18 A. That's correct.

19 Q. In Asetek's accused Gen 5, 6, and 7 products,
20 the portion of the gasket structure that overlies the
21 microchannels and microchannel fins of the heat
22 spreader plate is made of EPDM; correct?

23 MR. DYER: Objection. Asked and answered.

24 THE WITNESS: Yes, it's made of EPDM.

25 BY MS. BHATTACHARYYA:

1 Q. You're interpreting the claim term "plate" in
2 CoolIt's claims to include both a metal plate, as in
3 the Gen 4 products, as well as a structure made of
4 EPDM, as in Asetek's Gen 5, 6, and 7 products;
5 correct?

6 A. There is no material limitations for the
7 plate in the disclosure of '266 and various other
8 CoolIt patents. And it has a structure that is
9 substantially two-dimensional -- it's structure that
10 is flat -- I don't want to say -- a structure that is
11 substantially flat, and it has to perform a job of
12 covering the top of the channels. And both the metal
13 plate and the EPDM are performing that job.

14 There are lots of other material properties
15 which could have additional limitations, but those
16 limitations are not present in the disclosure or the
17 claims of '26- -- '330 and the -- some of the other
18 CoolIt patents.

19 So I do not believe that there is any other
20 limitation that is present. For example, right, I
21 mean, you know, they could be optically transferring
22 or optically opaque. They could be electrically
23 conductive or nonconductive. None of those kinds of
24 limitations are present; therefore, we could map the
25 plate to be metal or plate to be some other material,

1 like EPDM, that is performing the function of covering
2 the top of the channels.

3 Q. So you're interpreting the claim term "plate"
4 to cover any kind of material, be it rigid or
5 compliant, as long as it performs the function of a
6 plate; is that right?

7 MR. DYER: Objection. Mischaracterizes his
8 testimony.

9 THE WITNESS: This material could not be so
10 floppy that it could not regain the pressure
11 differentials across this plate and distorts against
12 that minutia stuff of stress. Those materials could
13 not perform the function of a plate.

14 But there is nothing limiting about a plate.
15 I mean even from -- look at it from the point of view
16 of like, you know, your household; right? I mean we
17 use -- I mean I certainly use Styrofoam plates or
18 paper plates. You know, I mean, in fact, I just
19 picked up a plate from my home just like earlier
20 today, and that was used to kind of -- it was left
21 over from feeding a baby. And, you know, this is the
22 plate and, you know, it's flexible like anything;
23 right?

24 I mean just within my home today, in the
25 morning I walked over and picked up some things that

1 were -- I mean I'll point to you another thing which I
2 picked up from my son. And he's 21 years old and
3 doing bodybuilding and, you know, he refers to this as
4 rubber plate. This is called a rubber plate in
5 weightlifting. And, you know, it's without rubber.
6 You would call it stiff under your definition,
7 completely stiff, in fact. Probably it's made out of
8 EDPM.

9 Again, my home, I just got it repaired, and
10 the roofing guy brought in -- I had a leak in my
11 skylight, and he brought in EPDM plates that were --
12 you know, I could not -- I could not bend it with my
13 hand.

14 So just looking at this as, you know, in a
15 very simple manner that it is, you know, compliant or
16 it is stiff, I mean, from a point of view of a POSITA,
17 when he looks at these patents in its entirety, the
18 plate has a function of covering the top of the
19 channels. They -- as long as they cover the top of
20 the channels without allowing the fluids to leak out
21 of it, it is a plate from the point of view of person
22 of ordinary skill in the art.

23 Now, we cannot say the plate is coming made
24 out of China. I mean it could be made out of silicone
25 or could be made out of Styrofoam, which is, you know,

1 EPS or something that is fairly soft. So, you know,
2 there's no additional limitation that -- that, you
3 know, we are trying to bring in.

4 Q. The '330 patent and the 2007 provisional do
5 not provide any disclosure for the material of the
6 plate; correct?

7 A. Yes. It's not limiting.

8 Q. And are you aware that the Patent Office has
9 found that there is no disclosure for a compliant
10 plate in the 2007 provisional and the '330 patent?

11 MR. DYER: Objection. Mischaracterizes.

12 THE WITNESS: Frankly, I disagree with that
13 position from PTAB. I believe that there is ample
14 disclosure which I have laid out in those IPRs that
15 you referred to earlier.

16 Furthermore, like I laid out earlier, from a
17 point of view of POSITA, if this was so compliant,
18 then it could not perform its function because it
19 might distort against the pressure -- pressure
20 differential that is present between two sides of the
21 plate.

22 Compliancy, again, is not a material
23 property. The reason that that entire discussion came
24 in in the further 2011 disclosure had to do with the
25 fact that the compliant insert was substantially

1 thick, and therefore, if it is made out of more solid
2 materials, you know, more stiff materials, then it
3 will have no compliancy at all if it was made out of
4 more -- you know, I should say, tougher materials,
5 right, because toughness is more related to the
6 material property than compliancy.

7 BY MS. BHATTACHARYYA:

8 Q. Dr. Pokharna, I understand that you disagree
9 with the position taken by the patent office. But I'm
10 just asking you, you are aware that the patent office
11 disagreed with you with respect to whether there is
12 disclosure for a compliant member or plate in the 2007
13 provisional; correct?

14 MR. DYER: Objection. Mischaracterizes.

15 THE WITNESS: I -- I believe the patent
16 office did disagree from certain parts of my analysis.
17 I don't recall exactly all the details of their
18 argument.

19 BY MS. BHATTACHARYYA:

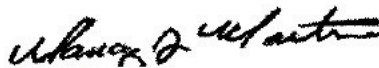
20 Q. Let's switch gears a little bit.

21 MR. DYER: Counsel, I'm not sure what the --
22 it seems like we've been on the record for a while, so
23 if it's a good point to break -- I may be wrong, but
24 it's my brain, seems to think it's been pretty long.

25 MS. BHATTACHARYYA: It's been a little over

C E R T I F I C A T E

I do hereby certify that the aforesaid testimony was taken before me, pursuant to notice, at the time and place indicated; that said deponent was by me duly sworn to tell the truth, the whole truth, and nothing but the truth; that the testimony of said deponent was correctly recorded in machine shorthand by me and thereafter transcribed under my supervision with computer-aided transcription; that the deposition is a true and correct record of the testimony given by the witness; and that I am neither of counsel nor kin to any party in said action, nor interested in the outcome thereof.



Nancy J. Martin, RMR, CSR

Dated: January 10, 2022

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